



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

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Chicago Department of Public Health
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What is the risk?

Currently, the risk of influenza infection has increased. Vaccination is the best way to protect against influenza infection and all Chicagoans aged six months and older are encouraged to get vaccinated. **Vaccinate Chicago Week** is December 2 through December 8. CDPH has scheduled numerous activities to remind Chicagoans that “It’s Not Too Late to Get a Flu Shot” and will be offering vaccine clinics throughout the city. A complete [list of activities and clinics](#)¹ is available on the City website and by calling 311.

Are severe cases of influenza occurring?

Suspected novel and variant influenza, pediatric influenza-associated deaths, influenza-associated ICU hospitalizations and outbreaks of influenza-like illness in a congregate setting should all be reported to CDPH via [INEDSS](#)². For the week of November 25-December 1, 2012 (week 48), **9 influenza-associated ICU hospitalizations** were reported; 8 were positive for influenza A by PCR (5 H3N2 and 3 not subtyped) and 1 was positive for influenza B by rapid test. Five (56%) were female and African-American, the median age was 37 years (range: 5-96 years), 2 (22%) had lung disease (including asthma) and 3 (33%) required ventilator support.

Since September 30, 2012, 15 influenza-associated ICU hospitalizations have been reported; 13 were positive for influenza A (7 H3N2 and 6 not subtyped) and 2 were positive for influenza B. Eight (53%) were female and 9 (60%) were African-American, the median age was 61 years, 6 (40%) had lung disease and 5 (33%) required ventilator support. No deaths have been reported.

How much influenza-like illness is occurring?

CDPH receives data from over 50 surveillance sites across Chicago, which report the total number of patient visits per week, and of those visits, the number with influenza-like illness (ILI) (i.e., fever of 100°F or greater, with cough or sore throat). All hospitals in Chicago are required to report on a weekly basis the total number of emergency department visits, and of those visits, the number with ILI. For the week of November 25-December 1, 2012, with **14** hospitals reporting, **3.2%** of emergency department visits were due to ILI. Currently, ILI activity is slightly higher than levels seen in the past two influenza seasons (**Figure 1**).

ESSENCE is an electronic syndromic surveillance system that utilizes emergency department chief complaint data submitted daily by participating Chicago hospitals. ILI activity is determined by an algorithm solely based on the patient’s chief complaint and does not take into account the entire medical record, as the ILI activity reported in Figure 1 does. Currently, 9 Chicago hospitals submit data to ESSENCE. **Figure 2** shows the percent of the total emergency department visits due to ILI for pediatric patients (**2.2%**) and adult patients (**<1%**) for the week of November 25-December 1, 2012 plus the ILI activity by age group for the previous season.

Several outpatient clinics and two large outpatient clinic networks located in Chicago participate in CDC’s Influenza-like Illness

Figure 1. Percent of emergency department visits attributed to influenza-like illness based on manual reporting as determined by individual hospitals, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.

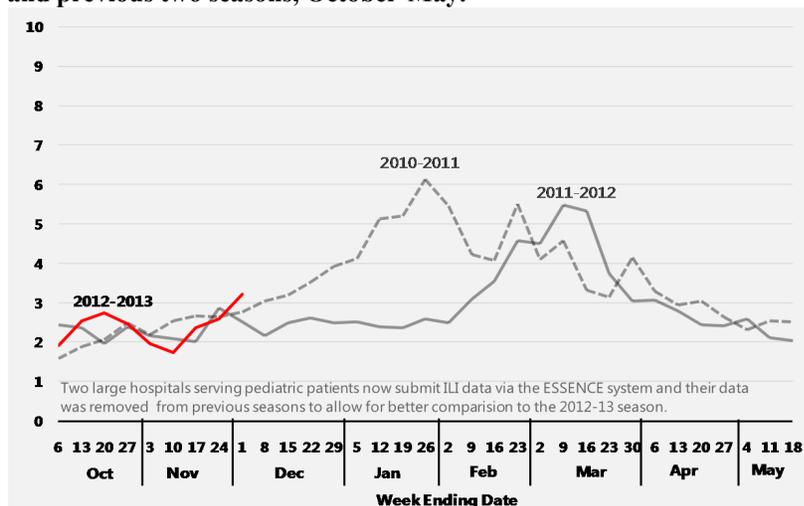
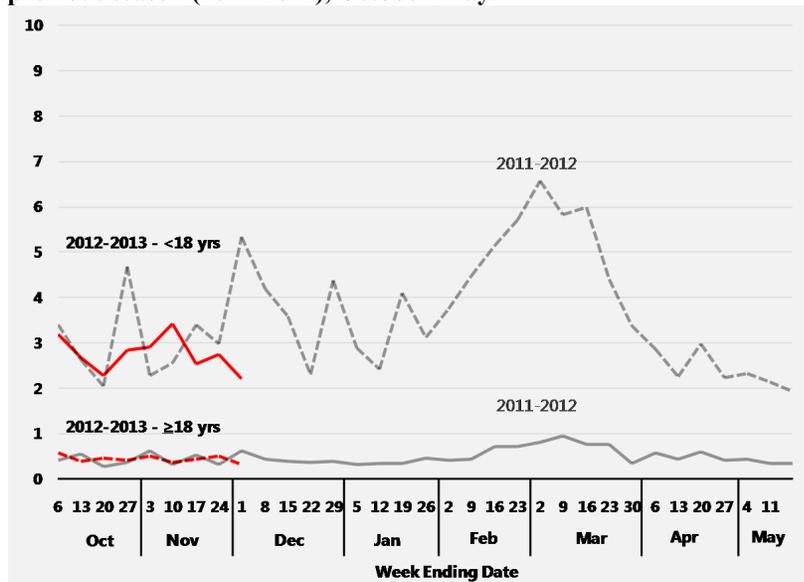


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on chief complaint data submitted to ESSENCE, Chicago, by week, for current season (2012-2013) and previous season (2011-2012), October-May.



¹http://www.cityofchicago.org/city/en/depts/cdph/provdrs/flu/svcs/cdph_flu_shot_sitesacrosschicago.html; ²<https://dph.partner.illinois.gov/>

Surveillance Network (ILINet) by reporting on the number of patients with ILI seen weekly. From November 25-December 1, 2012, with 36 outpatient clinics reporting, 4.4% of doctor's office visits were due to influenza-like illness (Figure 3).

Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza subtyping. For the week of November 25-December 1, 2012, with 6 laboratories reporting, 37 of the 241 (15%) specimens tested for influenza were positive. Among the positive specimens, 36 were typed as influenza A (23 H3N2, 3 H1N1, and 10 not subtyped) and 1 typed as influenza B (Figure 4). Since September 2012, 66 of 1,851 (3.6%) specimens tested for influenza have been positive. Table 1 shows the total number of specimens tested for influenza this season and the number positive by subtype compared to the same time period last season.

Where can I get more information?

The Centers for Disease Control and Prevention's [Flu-View](#)³ report provides national updates and trends related to the intensity of influenza activity across the United States, as well as detailed information on antiviral resistance, severity of illness, and other topics. Updates specific to [Illinois](#)⁴ and [Suburban Cook County](#)⁵ are also available online. Current and archived issues of the *Chicago Flu Update* can be found on the CDPH website section [Current Flu Situation in Chicago](#)⁶.

National Snapshot (November 24-December 1, 2012)

Viral Surveillance: Of 5,511 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories during week 48, 1,139 (20.7%) were positive for influenza.

Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.

Influenza-associated Pediatric Deaths: Three influenza-associated pediatric deaths were reported. One of these deaths was associated with an influenza B virus and two were associated with influenza A viruses for which the subtype was not determined.

Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 1.9%, which is below the national baseline of 2.2%. Three regions reported ILI above region-specific baseline levels. Four states experienced high ILI activity, three states experienced moderate ILI activity; 6 states experienced low ILI activity; New York City and 37 states experienced minimal ILI activity, and the District of Columbia had insufficient data.

Geographic Spread of Influenza: The geographic spread of influenza in 8 states was reported as widespread; 15 states reported regional activity; 15 states reported local activity; the District of Columbia, Guam, and 12 states reported sporadic activity, and Puerto Rico and the U.S. Virgin Islands did not report.

Figure 3. Percent of outpatient visits attributed to influenza-like illness, Chicago, by week, for current season (2012-2013) and previous two seasons, October-May.

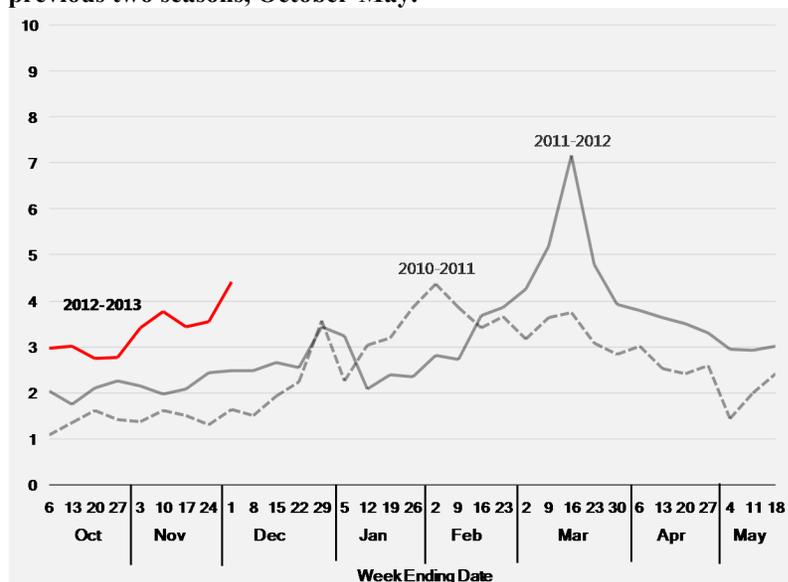


Figure 4. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2012-2013) October-May.

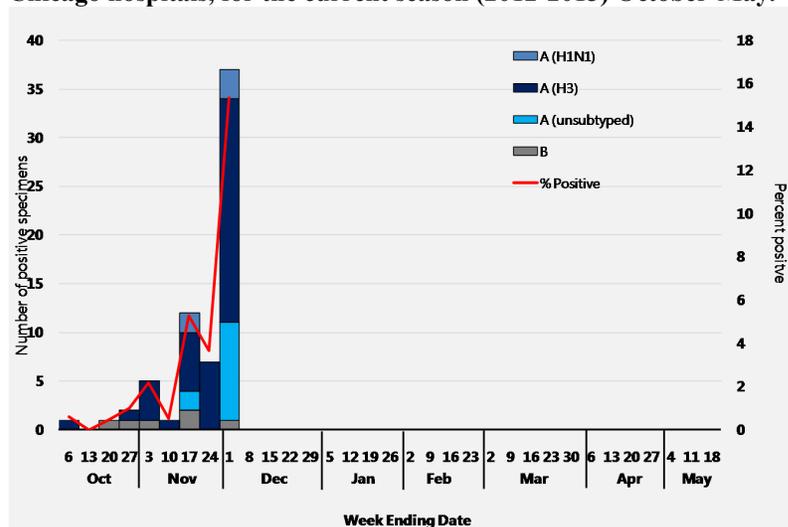


Table 1. Influenza testing results reported for surveillance weeks 40 through 48 by season, Chicago.

Laboratory Results	Influenza Season	
	2011-2012	2012-2013
# Specimens Tested*	1160	1851
# Specimens Positive	3	66
Positive for Influenza A	2	60
Subtype H3N2	1	43
Subtype 2009 H1N1	0	5
Not Subtyped	1	12
Positive for Influenza B	1	6

*Six Chicago laboratories performing influenza subtyping that have consistently reported results for both seasons.

Report is preliminary and may change as additional data is received

³<http://www.cdc.gov/flu/weekly/index.htm>; ⁴<http://www.idph.state.il.us/flu/surveillance.htm>; ⁵<http://www.cookcountypublichealth.org/data-reports#Influenza>; ⁶http://www.cityofchicago.org/city/en/depts/cdp/supp_info/influenza/current_flu_situationinchicago2011.html